



NDTSS Five-Year Retention Study 2019-2020

Introduction

Education is one of the great pillars of community. During societal challenges and uncertainty, education is the constant foundation for efficaciously moving forward. Schools are a haven for students to learn and practice skills reaching beyond reading, writing, and arithmetic. The classroom is a place where children explore social behaviors, develop self-image, create an understanding of positive conflict, and build personal character. For some learners, schools are the place they feel safest and most cared for. Consequently, this relationship requires educators to be committed and work hard to ensure student needs, academic, emotional, and physical, are being met.

One way this relationship is nurtured is by creating a positive and safe school climate. When learners feel safe, respected, and empowered, they are more willing to ask questions, take risks, and expand their thinking. Teachers who reinforce these behaviors are moving students toward better outcomes. Consistency within school guidelines and expectations, communication, and staff assignment is an important factor in creating an optimal learning environment. Unfortunately, consistency is difficult to achieve unless teachers are retained.

Retaining teachers, particularly in rural areas, is a goal of all school districts due to the positive impact on student achievement. Additionally, when schools work to keep effective teachers, they are investing in the long-term success and well-being of the students. Comprehensive teacher induction programs have been praised for providing the support that is much needed by beginning teachers. In turn, research has centered on induction programs as the answer to the cry for the increase in teacher retention (Guha et al., 2017; Prilleltensky, Neff, & Bessel, 2016; Ronfeldt & McQueen, 2017; Schmidt, Young, Cassidy, Wang, & Laguarda, 2017).

In 2009, the state of North Dakota recognized the role of supporting new teachers in retention by writing the North Dakota Teacher Support System (NDTSS) Mentoring Program into state Century Code, Chapter 15.1-18.2. Since 2010, the NDTSS has worked to build the capacity of new teachers by providing a multi-tiered program focusing on mentorship. The NDTSS offers an abundance of professional learning opportunities and leveraged support for educational leaders.

The purpose of this study was to analyze teacher retention in North Dakota in terms of teachers who participated in the Mentoring Program compared to teachers who did not participate in the Mentoring Program. The findings of the study will help determine the effectiveness of the program at increasing teacher retention in North Dakota schools.

Research Questions

The following questions provided the framework for this study.



1. What is the current retention rate of teachers in North Dakota after one, two, three, four, and five years of in-field teaching?
2. What is the current retention rate of teachers who participated in the NDTSS Mentoring Program in North Dakota schools after one, two, three, four, and five years of in-field teaching?
3. What is the current retention rate of teachers who did not participate in the NDTSS Mentoring Program in North Dakota schools after one, two, three, four, and five years of in-field teaching?

Assumptions

The researcher considered the following assumptions when conducting the research study.

1. Educators who are currently employed in the North Dakota school system submitted a MISO3 form and/or are recorded in the NDTech website.
2. North Dakota educators who completed the MISO3 form self-reported zero years of experience during their first year of teaching.
3. North Dakota educators who are not in their first year of teaching self-reported a number of years of experience greater than zero.
4. Teachers who indicated zero years of experience and consecutive years of experience until the current 2019-2020 schoolyear were first year teachers during the school of their initial data entry.
5. Teachers who have an education record prior to the year they indicated as zero years of experience, were not first year teachers during the schoolyear they reported on the MISO3 form.
6. Teachers who indicated zero years of experience and were employed at a private education institution, would not have been eligible to participate in the NDTSS mentoring program.
7. Administrators and other licensed educators are included in the MISO3 data.

Limitations

Although additional measures were considered during this study in comparison to the previous three-year retention study reported in 2019, limitations continue to exist. The NDTSS considered the following limitations when collecting and analyzing retention data of teachers in North Dakota.

1. Data from the North Dakota MISO3 educator form and the NDTech website, were utilized to inform this study. Human error may be present in the collected data due to the nature of self-report and cross referencing between the MISO3 and NDTech databases.
2. The process for inputting teacher information in the MISO3 form varies depending on school and/or district. Inconsistencies in data input implies the probability of errors.
2. Educators who are not currently teaching in the kindergarten through twelfth grade levels do not report using the MISO3. Therefore, educators who are currently teaching in higher



education, are teaching but have relocated outside of the state of North Dakota or hold positions in an outside educational entity are not included in this study.

3. The researcher did not contact educators included in the MISO3 form to collect information regarding their current state of employment. Data extracted from the MISO3 and NDTeach were considered correct and used to determine teacher retention rates.

Literature Review

Much attention recently has been placed on the issue of teacher shortage. Stories describe instances of retired educators re-emerging in schools to teach in positions that are difficult to fill. Other measures, such as alternative licenses and teaching permits, have been implemented to combat the crisis of teacher shortage. It has become a growing concern particularly for schools located in rural regions. With more than 88% of districts in North Dakota classified as rural (NDES, n.d.), this trend is potentially problematic for ND schools.

High teacher turnover, especially in smaller school districts and high-need schools, can have dire effects on student wellness and performance, school improvement, teacher effectiveness, and school finances (Holdheide & Lachlan-Hach, 2019; Guha, Hyler, & Darling-Hammond, 2017). Schools that suffer from teacher turnover find it difficult to establish and work toward goals, make gains in school improvement, collaborate effectively, and nurture relationships with families.

A recent body of research has underscored the importance of teacher retention in addressing shortage concerns (Carver-Thomas & Darling-Hammond, 2019). When schools focus on retaining their current teachers, they are building the capacity and empowering the leadership already present within the school community. Utilizing the expertise and knowledge of experienced teachers to support and attend the needs of beginning teachers, the school is investing in relationships and community. Building relationships among staff members supports a positive work environment leading to more effective collaboration and mutual support and strength during challenging times (Guha, Hyler, & Darling-Hammond, 2017). The powerful work of nurturing relationships can be evidenced through the well-being and growth of students.

Numerous studies have identified teacher retention as a factor in creating and maintaining positive school climates (Carver-Thomas & Darling-Hammond, 2019; Glazer, 2018; Sucher, Darling-Hammond, & Carver-Thomas, 2016). Expectations and processes that are fluently practiced throughout the school increase the sense of unity, safety, and investment in school continuous improvement. Retaining school staff and faculty promotes a positive learning environment.

Perceived support and teacher preparedness are two factors that impact the decision of a teacher to stay at a school or in the field of education (Carver-Thomas & Darling-Hammond, 2019). Holdheide & Lachlan-Hach (2019) suggested that comprehensive induction programs, including mentoring, for beginning teachers increases teacher effectiveness, student engagement, and use of formative assessment. Furthermore, beginning teachers who receive induction support (including mentoring) early in the profession are less likely to move to another school or leave



teaching altogether (Ronfeldt & McQueen, 2017). Ultimately, added support for new teachers during the first years in the classroom has a positive effect on student outcomes.

In effort to combat teacher attrition, the North Dakota Teacher Support System was established to offer professional learning opportunities and continual support for mentor teachers, instructional coaches, and beginning teachers. The NDTSS Mentoring Program aims to increase teacher retention in North Dakota. Since research has suggested that teachers leave the profession at an alarming rate within the first five years of teacher, this study analyzed data over a five-year period (Chambers Mack et al., 2019; Ingersoll et al., 2018; Ronfeldt & McQueen, 2017).

Methodology

The purpose of this study was to determine the rate of retention for teachers in the 2019-2020 schoolyear who were employed as first-year teachers during the 2014-2015, 2015-16, 2016-17, 2017-18 and 2018-2019 schoolyears. Data for this study were collected from samples of teachers who received mentoring through the North Dakota Teachers Support System (NDTSS) Mentoring Program and teachers who did not receive mentoring through the NDTSS Mentoring Program.

The Sample

North Dakota educators who are currently employed and licensed in kindergarten through twelfth grade in the North Dakota school system are required annually to complete the MISO3 form from the state of ND. Data from the form include employment information of all teachers, including the number of years of experience. The NDTSS requests the MISO3 form spreadsheet from the Department of Public Instruction and uses the data to determine the number of new teachers in North Dakota each year.

All educators included on the MISO3 form for the targeted school years were considered in the data collection. Teachers who indicated zero years of experience were cross referenced on the website NDTeach to further gather evidence of prior teaching experience or inconsistent data in consecutive years following the initial year of record. Teachers who a) indicated zero years of experience; b) were employed by a public school during their initial year of experience; c) had no previous record of teaching employment in the state of ND; and d) reported consecutive years of experience consistently from the initial reported first year and the 2019-2020 schoolyear were considered the population of the study. The stratified list of teachers with the qualifying variables was further analyzed to distinguish between Mentoring Program participants and non-participants.

Mentoring Program Participants

Utilizing the NDTSS database, Mentoring Program participants were extracted from the teacher population created from the initial MISO3 forms for the corresponding schoolyears. Only participants who indicated zero years of experience on the MISO3 and had no previous



experience according to NDTech were considered in the sample. For each schoolyear, an average of 71 Mentoring Program participants did not fall within these parameters; therefore, a differential was created between the actual number of participants of the Mentoring Program and sample size used in the retention study. This measure was taken to increase the validity of the study by narrowing the participants and non-participants samples to promote consistency in sample parameters.

Teachers who met the above criteria were individually searched in NDTech to determine their retention for the 2019-2020 schoolyear. The retention rate for the NDTSS Mentoring Program was based on the results.

Mentoring Program: Non-Participants

To determine the sample size for non-participants of the Mentoring Program, all NDTSS participants were removed from the population. The remainder of teachers were searched in NDTech for the following criteria:

- Teacher is currently employed in a North Dakota Public School district;
- Teacher is employed during their first year of teaching in a North Dakota Public School district (not private);
- Teacher indicated zero years of experience during the schoolyear targeted in the study;
- Teacher has no previous record of experience prior to the schoolyear targeted in the study; and,
- Teacher reported consecutive years of experience in NDTech between the schoolyear targeted in the study and the 2019-2020 schoolyear.

Teachers who fell within these parameters were included in the non-participant sample size for the study and an individual search for the teacher in NDTech was conducted. Teachers who had an education record for the 2019-2020 schoolyear were considered retained. Teachers who had no record for the 2019-2020 schoolyear were considered not retained. The retention rate for non-participants of the Mentoring Program was determined by these findings.

Findings

The NDTSS has conducted an annual retention study since program inception to determine the retention percentage for new teachers who participated in the NDTSS Mentoring Program. Prior to 2019, no known research has included retention statistics comparing participating and non-participating teachers in the Mentoring Program. The NDTSS Three-Year Teacher Retention Study targeted three years of data to determine the rate of retention for North Dakota.

An expansion of the 2019 three-year study was conducted in the spring of 2020 and included an additional two years of data. The current Five-Year Teacher Retention Study expanded the targeted school years to include 2014-2015, 2015-2016, 2016-2017, 2017-2018, and 2018-2019. The findings of this research suggest teachers who participant in the NDTSS Mentoring Program



are retained at a greater rate than teachers who did not participate in the Mentoring Program. Data in Table 1 summarizes rates of retention for the past five schoolyears.

Table 1
Five-Year Rate of Teacher Retention in North Dakota

	2014-15	2015-2016	2016-2017	2017-2018	2018-2019
Non-NDTSS	64.6% n=212	69.4% n=284	72.8% n= 265	79.4% n= 218	85.8% n= 296
NDTSS	71.1% n= 273	73.7% n= 278	83.5% n= 254	87.0% n= 215	96.3% n= 298
Overall Retention Rate for Schoolyear	68.2% n= 485	71.5% n=562	78.0% n=519	83.1% n= 433	91.1% n=594

* *n* represents the sample for each indicated group.

Overall, teachers who participated in the NDTSS Mentoring Program were retained at a higher rate than teachers who did not participate. Findings from the past five schoolyears (2014-2015 to 2018-2019) ranged from a 4.3 to 10.7% difference, approximately totaling 102 teachers who may have stayed in the profession if they had participated in the Mentoring Program.

Financial Impact

Reports vary on the financial costs to school districts due to teacher turnover. However, recruiting, hiring, and training teachers new to a school can be financially burdensome. Studies suggest that replacing teachers costs between \$17,000 and \$22,000 (Holdheide & Lachlan-Hach, 2019). Considering the retention rates of participants and non-participants of the Mentoring Program, if all teachers were retained at the rate of participants, North Dakota would have had the potential of saving over \$2 million over the past five years (see Table 2). Although this estimation may be exaggerated due to differences in costs in North Dakota compared to nationwide costs, the starkness of the number stresses the need for a conversation regarding the impact of mentoring on teacher retention.



Table 2
Estimated Financial Impact of Teacher Retention in North Dakota

Schoolyear	# of not mentored teachers multiplied by the difference in retention rate	# of teachers
2018 – 19	296 X 10.5% =	31 teachers
2017 – 18	218 X 7.6% =	17 teachers
2016 – 17	265 X 10.7% =	28 teachers
2015 – 16	284 X 4.3% =	12 teachers
2014 – 15	212 X 6.5% =	14 teachers
	TOTAL	102 teachers
Estimated cost per teacher multiplied (\$17,000 to 22,000) by number of teachers		Cost: \$1,734,000 to \$2,040,000

Conclusion

The first five years of teaching are critical to retaining teachers in the profession. Providing a comprehensive and structured induction program to new teachers can help to improve or alleviate the issue of teacher turnover. The findings of this study suggest teachers who participate in the NDTSS Mentoring Program are more likely to stay in the teacher profession during their first five-years of teaching. Thus, when teachers are retained, positive school and student outcomes are more likely.

Future research can continue a longitudinal study to include retention data from additional schoolyears and examine possible trends in the data. Research centered on the effectiveness of induction programs also emphasize the need for support for new teachers beyond the first year of teaching. Comprehensive programs suggest mentoring support for new teachers should last as least two to three years. Expanding the Mentoring Program from a one-year to a two-year program is being explored.

The NDTSS is collaborating with the North Dakota Department of Public Instruction to revise questions on the MISO3 form to addresses specific concerns in number of years of experiences reporting and enrollment in loan forgiveness programs. Creating a more accurate measure for collecting data on first-year teachers would increase the reliability and validity of the study. In addition, cost estimations for recruiting, hiring, and training teachers new to a school or district are being explored.

The intent of this research study was to determine the retention rate for North Dakota teachers and use the data as a comparison between teachers who participated in the NDTSS Mentoring Program and those who did not. The data suggest participation in the NDTSS Mentoring Program increases the likelihood of teachers to stay within the profession during their first five



years of teaching; teachers who do not participate in the program are more likely to leave the teaching position during the first five years in the classroom.



References

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